III. The Drawings are Accepted

Applicants thank the Examiner for accepting the drawings.

IV. The Certified Copies of the Priority Documents Have Been Received

Applicants thank the Examiner for acknowledging receipt of the certified copies of all the priority documents.

V. The Substitute Specification Has Been Entered

Applicants thank the Examiner for entering the substitute specification.

VI. The Rejection of Claim 8 under 35 U.S.C. §102(b) over Surwit is Traversed, but Accommodated

The Examiner has rejected claim 8 under 35 U.S.C. §102(b) alleging anticipation by Surwit et al. (WO 98/31396; see the entire PCT application; "Surwit"). Applicants respectfully disagree, but have amended claim 8 in the interests of timely prosecution.

In the Office Action mailed August 8, 2007, the Patent Office had indicated that claims 8, 11, and 17 were allowable, but the Patent Office has introduced this new rejection.

The Patent Office alleges in pertinent part:

> Surwit et al teach the identification and cloning of nucleic acid sequences encoding hUCP-2 and 5' sequences controlling the expression of hUCP-2. Surwit et al specifically disclose that the fragment contains the putative promoter region (see page 16, lines 1-20). Further, Surwit et al teach the isolation of a lambda EMBL3 phage comprising ~14 kb of human sequences. This clone comprises all 8 exons of the human UCP-2 gene, as well as a minimum of 3 kb of DNA upstream of the putative +1 site (see page 32, lines 23-28 bridging to page 33, lines 1-5, in particular). Given the size of the genomic clones obtained by the inventors of the Surwit et al application (e.g. at least 3 kb upstream of the transcription initiation site) and the fact that the sequences recited in the claims are all within ~2.2 kb of the initiation site (e.g. see amended Figure 4 of the instant Specification), absent evidence to the contrary the clones obtained by Surwit et al necessarily comprise SEQ ID NO: 1 and the recited parts thereof. Therefore Surwit et al anticipate a human UCP-2 promoter sequence wherein the sequence consists of all or a part of a base sequence consisting of nucleotides 1 to 2270 or a part of the base sequence as recited in claim 8. [P. 3, l. 12; to p. 4, l. 4.]

Applicants respectfully disagree, but have amended claim 8 in the interests of timely prosecution.

Claim 8 has been amended to recite a DNA **consisting of** (1) a base sequence consisting of nucleotides 1 to 2270 of SEQ ID NO: 1 or (2) a base sequence selected from the group specifically recited in the claim.

Applicants respectfully submit that the DNA recited in amended claim 8 is not anticipated by Surwit because Surwit does not describe or suggest the DNA **consisting of** the bases sequences recited in the amended claims of the present application, as nothing in Surwit discusses the significance of these specific sequences.

Applicants also respectfully wish to draw the Examiner's attention to the previous arguments concerning sequences undisclosed or otherwise different in Surwit. In Surwit, a promoter sequence is partially disclosed. A 14 kb human DNA is described, which "contains all the 8 exons and introns, and a minimum of 3 kb of DNA upstream of the putative +1 site" (p. 32, ll. 25-27). Four regions of this clone were sequenced. Specifically,

the Sequence 2 of Figure 10B, which is a sequence containing a transcription initiation site, appears to correspond to a portion of the present invention, **but the two sequences are not identical and display a certain degree of variation** (see also, e.g., Exhibit A of the Amendment, mailed October 7, 2005). The first nucleotide of Sequence 2 appears to correspond to about the 1730th nucleotide of SEQ ID NO: 1 of the present application. The specification of Surwit states that "Sequence 2 corresponds to a 1161 bp DNA from positions BP –511 to +650" and that "this fragment contains the putative proximal human UCP2 promoter" (p. 33, ll. 3-5). In addition, the Sequence 1 of Figure 1A appears to be upstream of the sequence of the present invention. Surwit states that "Sequence 1 corresponds to 640 bp of DNA forming the 5' extremity of the human [UCP2] DNA" (p. 33, ll. 1-3). The "5' extremity" is "a miniumum of 3 kb of DNA upstream of the putative +1 site," which is upstream of the sequence of SEQ ID NO: 1 of the present invention. (According to Figure 9 of Surwit, Sequence 3 (Figure 10C) and Sequence 4 (Figure 10D) are downstream of the +1 site.)

Applicants' additional arguments already of record with respect to Surwit are not reiterated here, but Applicants respectfully submit that these arguments apply to the discussion here.

Applicants respectfully submit that the present claim 8 fulfills the requirements of 35 U.S.C. §102(b) and request the Examiner's reconsideration of this claim accordingly.

VII. The Rejection of Claims 11 and 17 under 35 U.S.C. §103(a) over Surwit in view of Stratagene is Traversed, but Accommodated

The Examiner has rejected claims 11 and 17 under 35 U.S.C. §103(a) alleging obviousness over Surwit et al. (WO 98/31396; see the entire PCT application; "Surwit") in

view of the Stratagene catalog (1988; Table of Contents, p. 39; "Stratagene"). Applicants respectfully disagree, but have amended claim 11 in the interests of timely prosecution.

Claim 17 is dependent on claim 11, and the arguments in view of claim 11 also apply to claim 17.

In the Office Action mailed August 8, 2007, the Patent Office had indicated that claims 8, 11, and 17 were allowable, but the Patent Office has introduced this new rejection.

In addition to the discussion of Surwit, the Patent Office alleges in pertinent part:

> The Stratagene 1988 catalog discloses the advantage of using gene characterization kits. Stratagene teach that the advantage of a kit is that the variety of different reagents are assembled and premixed specifically for a defined set of experiments, and that components of a kit are subject to quality control (see page 39, left column, in particular).
>
> It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the elements taught by Surwit et al into a kit because Stratagene teaches that it is advantageous to have reagents in a kit format. The motivation to combine the plasmid, medium and host cell line in a kit is the expected benefit as taught by Stratagene of being able to reduce waste of reagents and money because it is not necessary to buy or make large quantities of different reagents to begin a series of experiments. There is a reasonable expectation of success in being able to combine the multiple elements for promoter activity assays into a kit since it has worked previously in the cited reference. Given the teachings of the prior art and the level of skill of the ordinary skilled artisan at the time the invention was made, it must be considered that said ordinary skilled artisan would have had a reasonable expectation of success in practicing the claimed invention. Therefore, Surwit et al in view of the Stratagene catalog 1988 page 39 render obvious a kit comprising the plasmid as claimed, a medium for culturing a cell line and a host animal cell line **(claim 11).**
>
> Surwit et al teach that the UCP2 promoter can be operably linked to reporter genes such as luciferase and GFP (see page 19, lines 11-16, for example), which meets the limitation of a reporter gene that is luciferase **(claim 17).** [Pp. 6-7.]

Applicants respectfully disagree, but have amended claim 11 in the interests of timely prosecution.

Claim 11 has been amended to recite a DNA **consisting of** (1) a base sequence consisting of nucleotides 1 to 2270 of SEQ ID NO: 1 or (2) a base sequence selected from the group specifically recited in the claim.

Applicants respectfully submit that the DNA recited in amended claim 8 is not anticipated by Surwit because Surwit does not describe or suggest the DNA **consisting of** the bases sequences recited in the amended claims of the present application, as nothing in Surwit discusses the significance of these specific sequences. One of ordinary skill in the pertinent art would not have been motivated to make the changes to the sequence disclosed in Surwit in order to obtain the claimed DNA.

Applicants also respectfully wish to draw the Examiner's attention to the previous arguments concerning sequence differences in Surwit, as discussed at length, *supra*, and elsewhere in the record. As a result, the disclosure of Stratagene cannot remedy the deficiencies of Surwit.

Applicants respectfully submit that the present claims 11 and 17 fulfill the requirements of 35 U.S.C. §103(a) and request the Examiner's reconsideration of these claims accordingly.

CONCLUSION

In view of the foregoing amendments and remarks, the present application is respectfully considered in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

It is believed that all outstanding rejections have been addressed by this submission and that all the claims are in condition for allowance. If discussion of any amendment or remark made herein would advance this important case to allowance, the Examiner is invited to call the undersigned as soon as convenient.

Applicants hereby request a one-month extension of time for the Amendment. If, however, a petition for an additional extension of time is required, then the Examiner is requested to treat this as a conditional petition for an extension of time and the Commissioner is hereby authorized to charge our deposit account no. 04-1105 for the appropriate fee. Although it is not believed that any additional fee (in addition to the fee concurrently submitted) is required to consider this submission, the Commissioner is hereby authorized to charge our deposit account no. 04-1105 should any fee be deemed necessary.

Respectfully submitted,

Date: May 9, 2008

Kathryn A. Piffat, Ph.D. (Reg. No. 34,901)
Intellectual Property Practice Group
EDWARDS ANGELL PALMER & DODGE, LLP
P.O. Box 55874
Boston, Massachusetts 02205
Telephone: 617-239-0100

Customer No. 21874